

Word Problem Applications

- 1) Figure out t_1
- 2) Figure out d
- 3) Create **explicit formula**
- 4) Solve for **requested values**
(pay attention to units!)

1) Anna gets a job managing the local fast food chain at the rate of \$32.50/hr. The management said that, depending on her performance, her hourly wage will be increased by \$7.50/hr every month. If she works for 12 months, what will her salary be the 12th month?

2) Manny deposited \$2,000 on an investment that will give \$1,750 for every year that his money stays in the account. How much money will he have in his account by the end of year 8?

3) In his piggy bank, Denzel dropped \$1.00 on May 1, \$1.75 on May 2, \$2.50 on May 3 and so on until the last day of May. How much did he drop in his piggy bank on the last day of the month?


4) Amara has to stack her neighbor's wood. She starts by putting 15 logs in the bottom row (row 1), 13 logs in the second row (row 2), 11 in the third row (row 3) and continues in the same pattern. She can only stack as high as her head, at 10 rows. How many logs are in the 10th row?

HW p. 705 # 78, 80-82

QUIZ next week

TUESDAY (C)

WEDNESDAY (E)

Continue Working on:  Arithmetic Sequence Practice @ hotmath.com

Problem: 1

Determine whether the sequence is arithmetic. Give reason for your judgment.

12, 10, 8, 6, 4, ...

Problem: 3

Determine the next four terms in the arithmetic sequence 9 19, 29, 39,

Problem: 9

If $a_1 = -5$, $d = -8$, find a formula for the n th term of the sequence.

Problem: 11

If $a_1 = 4$, $a_3 = 13$, find a formula for the n th term of the sequence.

Problem: 13

Find a formula for the n th term of the arithmetic sequence: $-2, -8, -14, -20, \dots$

Problem: 17

Determine the recursive and explicit formulas for the sequence $-18, -8, 2, 12, \dots$

Problem: 19

Calculate the 30th term of the sequence $-4, -2.6, -1.2, 0.2, \dots$

Problem: 41

Find the number of terms, the first term and the last term for

$$\sum_{n=1}^6 (3n - 5)$$

Find the sum.